

Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Mark Labhart

GENERAL INFORMATION:

Name:	Kentucky Cabinet Corporation
Address:	260 American Greeting Road Corbin, KY 40701
Date application received:	September 24, 2007
SIC/Source description:	2434, Wood Kitchen Cabinets
Source ID #:	21-125-00107
Source A.I. #:	74649
Activity #:	APE20070004
Permit number:	F-05-036 R3

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
___Administrative	<input type="checkbox"/> Title V
X Minor	<input checked="" type="checkbox"/> Synthetic minor
___ Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☐ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Emissions Potential with Addition of (1) New Spraybooth, Oven, and an Automatic Topcoating Machine (F-05-036 R3)

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	0.6	10
VOC	14.4	494
Single HAPs (CAS #)		
Ethyl Benzene (100-41-4)	< 9	5.4
Formaldehyde (50-00-0)	< 9	0.3
Methanol (67-56-1)	< 9	0.3
MIBK (108-10-1)	< 9	0.7
Napthalene (91-20-3)	< 9	0.9
Toluene (108-88-3)	< 9	1.4
Xylene (1330-20-7)	< 9	20.5
Source wide HAPs	< 22.5	29.5

Emissions Potential with Addition of (3) New Spraybooths (F-05-036 R2)

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	6	11.4
VOC	< 90	255.7
Single HAPs (CAS #)		
Ethyl Benzene (100-41-4)	< 9	2.5
Formaldehyde (50-00-0)	< 9	0.2
Methanol (67-56-1)	< 9	0.2
MIBK (108-10-1)	< 9	0.4
Napthalene (91-20-3)	< 9	0.5
Toluene (108-88-3)	< 9	5.1

Xylene (1330-20-7)	< 9	10.3
Source wide HAPs	< 22.5	19.1

Emissions Potential with Addition of New Baghouse (F-05-036 R1)

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	6	6
VOC	< 90	229.9
Single HAPs (CAS #)		
Ethyl Benzene (100-41-4)	< 9	2.4
Formaldehyde (50-00-0)	< 9	1.6
Methanol (67-56-1)	< 9	0.1
Toluene (108-88-3)	< 9	6.7
Xylene (1330-20-7)	< 9	10.6
Source wide HAPs	< 22.5	21.4

Emissions Potential of Original Equipment (F-05-036)

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	17.2	17.2
VOC	< 90	229.9
Single HAPs (CAS #)		
Ethyl Benzene (100-41-4)	< 9	2.4
Formaldehyde (50-00-0)	< 9	1.6
Methanol (67-56-1)	< 9	0.1
Toluene (108-88-3)	< 9	6.7
Xylene (1330-20-7)	< 9	10.6
Source wide HAPs	< 22.5	21.4

SOURCE DESCRIPTION:

Kentucky Cabinet Corporation located in Corbin, Kentucky manufactures kitchen and bath cabinetry. There is woodworking associated with the process, gluing operations, and finishing. The pollutants of concern are particulate matter, VOC and HAP. Particulates from the woodworking operations will be controlled by a baghouse. The adhesive used is a low VOC and HAP product. The majority of the VOC and HAP are emitted from 6 spray booths used for finishing operations. Potential emissions of VOC and HAP are greater than major source thresholds, but Kentucky Cabinet Corp. has requested Federally Enforceable Limits on the potential to emit.

MINOR PERMIT REVISION, F-05-036 R3: ADDITION OF A SPRAY BOOTH, COATING OVEN, AND THE RELOCATION OF EXISTING SPRAY BOOTHS

The source is adding (1) spray booth to the facility, converting an existing manual spray booth to an automatic topcoating booth, and relocating (2) other existing booths. These modifications will create a second coating line, except that topcoating for both lines will take place in the proposed automatic machine. The creation of the second coating line is necessary to handle larger cabinet components. Due to this proposed modification, the coatings applied in the existing spray booths will change as reflected in the description for each booth. This is not a change in the coating materials used by the source, rather a change in the location of where these coatings are applied. The wood working equipment EP 5 was also revised with this permit action in response to the addition of and replacement of equipment approved by the Division on June 6, 2007 under 401 KAR 52:030, Section 17, Off-Permit and Section 502(b)(10) Changes.

MINOR PERMIT REVISION, F-05-036 R2: ADDITION OF (3) SPRAY BOOTHS

The source adding (3) spray booth to the facility, (EP6, EP7 and EP8). Two of the proposed coating booths will be located on, or as a part of the existing coating line served by a monorail system. The third booth will be an off-line booth for touchup and repair. There are some changes in the coating materials being used sourcewide which are reflected in the KYEIS with this revision. Actual emissions are estimated to remain below major source limits; therefore no change in the existing permitted emission limitations was requested with this addition. The source wide potential emissions of VOC have increased due to the planned addition, but lower HAP containing materials has lead to a slight decrease in the sourcewide PTE for HAP.

MINOR PERMIT REVISION, F-05-036 R1: INSTALLATION OF A BAGHOUSE

The source is changing the particulate filtration system used for the woodworking processes. Currently, there are multiple small dust collecting units which exhaust into the building enclosure. These smaller filters are to be replaced by a single large baghouse to be located outside of the building. The new baghouse will exhaust directly to the ambient air, however the new collection system is considered to be more efficient than the smaller portable units, resulting in a reduction in the PTE for particulates of 11.2 TPY.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

Kentucky Cabinet Corporation has requested voluntary permit limits of less than 9.0 tons per year of individual hazardous air pollutants (HAP), less than 22.5 tons per year of combined HAPs, and less than 90 tons per year of VOC.

OPERATIONAL FLEXIBILITY:

The source is not restricted as to hours of operation or quantity of product produced while remaining within the caps above.